

## AMENDMENTS TO THE CLAIMS

Please amend claims 16, 17, and 19-24; and cancel claim 15, as set forth below:

1-15. (Canceled)

16. (Currently amended) An interactive seamer apparatus for seaming two or more single view images vertically or horizontally into a panoramic image images, comprising:

a user interface ~~having~~ comprising:

a first display area configured to display:

~~for displaying~~ a panoramic image generated from ~~a number of the two~~  
or more single view images having overlapping portions, each  
pixel in the overlapping portions encompassed by an outlined  
area having an opacity value that is determined by the location  
of the pixel in the outlined area and a predetermined opacity  
curve;

an array of two or more control points superimposed within an area in  
the panoramic image corresponding to an interior of a selected  
single view image for manually warping parts of the panoramic  
image corresponding to the selected single view image by  
moving the control points, the interior of the selected single  
view image excluding four corners of the selected single view  
image; and

[[a]] the second display area for displaying configured to display a selected  
single view image projected from the panoramic image, opacity values  
of pixels in the overlapping portions manually adjusted by changing a  
size of an outlined area of the selected single view image in the second  
display area;

~~wherein an array of two or more control points are superimposed within an area in the panoramic image corresponding to an interior of the selected single view image for manually warping parts of the panoramic image corresponding to the selected single view image by moving the control points, the warping independent of placement or movement of the selected single view image within the panoramic image; and~~

an image seamer configured to seam the two or more single view images vertically or horizontally for seaming the selected single view image into the panoramic image based on locations of the control points and the size of the outlined area in the second display area user specified parameters.

17. (Currently amended) The interactive seamer of claim 16, wherein the image seamer is further configured to seam the two or more single view images based on at least one~~parameter adjusts~~ the focal length of ~~the~~ a selected portion of the panoramic image.

18. (Previously presented) The interactive seamer of claim 16, wherein the user interface includes a third display area for displaying values of parameters.

19. (Currently amended) The interactive seamer of ~~claim 18~~ claim 16, wherein the parameters comprise at least one parameter provides associated with high resolution zoom to enable a user to examine artifacts without requiring a high resolution representation of the entire panoramic image.

20. (Currently amended) The interactive seamer of ~~claim 18~~ claim 16, wherein the parameters comprise at least one parameter specifies specifying an artificial horizon in the panoramic image.

21. (Currently amended) The interactive seamer of ~~claim 18~~ claim 16, wherein ~~the parameters comprise~~ at least one parameter specifies the specifying a lay down order of ~~multiple single the two or more single view images seamed together to form the panoramic image.~~

22. (Currently amended) The interactive seamer of claim 16, wherein the user interface ~~includes multiple~~ comprises at least view windows for simultaneously showing a perspectively correct view of the selected single view image and a changed view of the single view image.

23. (Currently amended) The interactive seamer of claim 16, wherein the ~~selected warped~~ single view image ~~with manually induced changes is capable of being~~ is repositioned within the panoramic image responsive to receiving a user input without disturbing the manually induced changes.

24. (Currently amended) A computer-implemented method of interactively seaming single view images vertically or horizontally in a partly overlapping manner into a panoramic image, comprising:

displaying a panoramic image generated from the two or more single view images in a first display area of a user interface;

displaying at least one of two or more single view images projected from the panoramic image in a second display area of the user interface, the two or more single view images having overlapping portions at least partially encompassed by at least one outlined area, each pixel in the overlapping portions encompassed by the outlined area having an opacity value that is determined by the location of the pixel in the outlined area and a predetermined opacity curve;

changing the opacity values of the pixels in the overlapping portions responsive to receiving first user inputs representing changing of a size of an outlined area in the second display area;

superimposing an array of two or more control points within an area in the panoramic image corresponding to an interior of a selected single view image, the interior of the selected single view image excluding four corners of the selected single view image;

warping parts of the panoramic image corresponding to the selected single view image responsive to receiving second user inputs for moving the control points;

seaming the two or more single view images vertically or horizontally in a partly overlapping manner into the panoramic image based on locations of the control points and the size of the outlined area in the second display area ;  
~~wherein the opacity values of the pixels in the overlapping portions encompassed by the outlined area are manually adjusted by changing the size of the outlined area in the second display area; and~~

storing the panoramic image.